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In re Application of.:

Joseph ITSKOVITZ-ELDOR et al

Serial No.: 10/5

10/536,734

Filed:

May 27, 2005

For:

Cultured Human Pancreatic Islets,

And Uses Thereof

Attorney

Group Art Unit:

29601

1651

Docket:

Examiner:

Taeyoon Kim

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## **LETTER TO CHIEF DRAFTSMAN**

Sir:

Permission is requested to correct Figure 1a as shown in red ink on the attached photocopy.

Since the foregoing are all relative minor changes and do not include new matter, the formal drawings, which are being submitted herewith in an accompanying letter, include the above-requested changes.

Respectfully submitted,

late O. Mogration

Martin D. Moynihan

Registration No. 40,338

Date: March 12, 2008

TILLE: CULTURED HUMAN PANCREATIC ISLETS, AND USES THEREOF



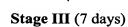
Fig. 1a

Stage I

Undifferentiated embryonic stem cells cultured on feeder cells



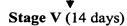
Generation of nesting positive islet cell progenitors in suspended embryoid bodies



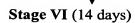
Culture of embryoid bodies in ITSF medium: elimination of nestin negative cells/progenitor isolation



Culture of progenitors with N2, B27, bFGF supplementation: expansion of progenitors



Replacement of bFGF with nicotinamide and reduction of glucose concentration to 5 mM: generation of surface-bound islet like clusters containing insulin producing cells



Suspension culture of dissociated surface-bound clusters:

- generation of purified suspended islet like clusters
- steep increase in insulin secretion capacity
- purification of insulin producing cells
- prolongation of *in-vitro* longevity of insulin producing cells

Fig. 1b

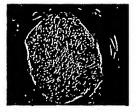


Fig. 1c



Fig. 1d

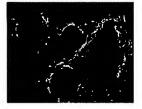


Fig. 1e

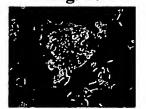


Fig. 1f



Fig. 1g



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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## **FORMAL DRAWINGS**

Sir:

We enclose herewith a new set of formal drawings (10 sheets) for the aboveidentified patent application.

Respectfully submitted,

). Moznika

Martin D. Moynihan

Registration No. 40,338

Date: March 12, 2008